

### **REMARKS**

Claims 24, 26, 36, 39, 41, 43, 45, and 47-51 are pending in the present application. By this amendment, claims 21-23, 25, 37, 38, 40, 42, 44, and 46 have been canceled. Additionally, claims 24, 26, 29-35, 41, 45 and 47-50 have been amended. The Applicant respectfully requests reconsideration in light of the following remarks.

Claims 22, 24-25, 27-28, 31-35, 38, 41, and 45-46 were rejected under 35 U.S.C. §102(e) as being anticipated by Inagaki et al. (U.S. Patent No. 5,745,283). The Applicant respectfully traverses this rejection based on the following reasons.

With respect to independent claims 22 and 46, the rejection of this claims is moot since they have been canceled by this amendment.

With respect to independent claims 24 and 45, the Applicant submits that Inagaki does not teach or suggest all of the elements of these claims. In particular, Inagaki teaches a method where gain differences between optical signals are controlled through the use of two light sources 14 and 16 that emit light of differing wavelengths. Inagaki et al., however, does not teach or suggest a method for adjusting tilting including injecting at least one pump signal into an optical conductor when at least two signal levels of measured signal levels of at least one of a plurality of transmission bands are changing as featured in amended claim 24. Rather, Inagaki et al. discloses a methodology where a control light is injected into a rare earth doped fiber and a second pumping light is also injected. Inagaki et al. then merely discloses that a control circuit 28 controls an optical power or emitting wavelength of the control light source (e.g. light source 40 as shown in Fig. 6) to thereby control the gain difference between signals. Nonetheless, Inagaki is devoid of teaching that either of the pump signals are specifically injected into the rare earth doped fiber when at least two signal levels are changing.

Moreover, the other prior art of record does not teach or suggest the missing elements of Inagaki. Accordingly, the Applicant submits that claim 24 is patentable over the prior art of record.

With respect to remaining dependent claims 27, 28, 31-35, and 41, which depend ultimately on independent claim 24, these claims are believed to be allowable at least by virtue of their dependency on independent claim 24.

With respect to independent claim 45, this claim is believed to be allowable over the prior art of record at least for the reasons presented above with respect to method claim 24. Additionally, the combination of Inagaki and Chikuma et al. (U.S. Patent No. 6,055,093) does not teach or suggest a controller that adjusts a power level of at least one of the pump signals such that "the tilting of a transmission band in which signal levels do not change remains at least substantially constant and a receiving portion of the optical conductor." Rather, Inagaki, in particular, teaches the desirability of maintaining a gain difference constant at zero, which would require tilting such that signal levels previously having no change would need to be changed in order to maintain the gain difference at a constant zero, rather than leaving the signals substantially constant. Furthermore, Chikuma does not teach or suggest this particular claimed feature. Accordingly, neither Inagaki or Chikuma, either taken alone or combined, do not teach or suggest all the elements of claim 45 and the rejection of this claim should be withdrawn, accordingly.

The rejection of claims 21, 42, and 44 is moot given their cancellation.

Claims 26, 30, 45, 47 and 49-51 were rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. in view of Chikuma et al. The Applicant respectfully traverses this rejection and submits that claims 26, 30, 47, and 49-51 are allowable at least by virtue of their dependencies either on independent claim 24 or 45. With respect to independent claim 45, this claim is believed to be allowable for the reasons presented above.

The rejection of claim 23 is moot given its cancellation.

Claims 36, 39 and 43 were rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki et al. in view of Zanoni et al. The Applicant respectfully traverses this rejection and submits that these claims are allowable at least by virtue of their ultimate dependency on independent claim 24.

The rejection of claims 37 and 40 is moot given their cancellation.

Claim 48 was rejected under 35 U.S.C. §103(a) as being unpatentable over Inagaki in view of Kidorf. The Applicant respectfully traverses this rejection and submits that this claim is allowable at least by virtue of its dependency on independent claim 45.

The Applicant thanks the Examiner for indicating that claim 29 was objected to, but would be allowable if rewritten in independent form including all the limitations of the base

claim and any intervening claims. By this amendment, claim 29 has been rewritten in independent form and the Applicant submits that this claim is allowable.

In conclusion, the Applicant submits that claims 24, 26-36, 39, 41, 43, 45, and 47-51 are in condition for allowance and request a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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